SACRED HEART COLLEGE (AUTONOMOUS), THEVARA KOCHI, KERALA, 682013

CURRICULUM AND SYLLABUS

FOR

B A ECONOMICS

CHOICE BASED CREDIT AND SEMESTER SYSTEM (CBCSS)

INTRODUCED FROM 2023 ADMISSIONS ONWARDS

Prepared by

Board of Studies in Economics

Sacred Heart College Thevara, Kochi.

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1. INTRODUCTION

Economics as a discipline is the study of how individuals, firms, government and global organizations make decisions and that together determine how resources are allocated. Economics is primarily concerned with important issues such as the behavior of individuals and firms and their strategic interactions, production and consumption of goods and how the wealth is created, lost and transferred globally. It also deals with economic growth and developmental issues, the causes and effects of poverty, inequality and unemployment. The discipline also explains the concept of inflation, income distribution, industrial organization, public policy design and implementation, management of the environment, and the means to improve overall efficiency and the standard of living. An appreciation of economics and the general workings of the economy have become increasingly necessary to make sense of governmental policy-making, the conduct of businesses and the enormous changes in economic systems occurring throughout the world.

In the past years, several new insights have been taken root and became important in economic theory and policy. In the light of the expanding horizons of knowledge in Economics, constant endeavors have been made to review the curriculum in many of the universities in the world to make Economics a vibrant and meaningful subject. The curriculum merits better pondering so as to make it practically more competitive and student centered in the multidimensional environment.

The Board of Studies resolved to restructure the curriculum and syllabi of BA Degree course under choice-based credit and semester system. The restructuring is attempted in such a way as to lay emphasis on student choice and self-learning. While attempting restructuring, the existing conditions relating to infrastructure, work load and staff pattern have been properly taken care of and provision for full utilization of the existing faculty is proposed. The task of restructuring was done by expert committees constituted for each course by the Department of Economics after considering proposals and suggestions of the members of Board of Studies in Economics.

1.1 Outcome Based Education (OBE)

BA Economics programme follows the Outcome-based Education (OBE) framework. OBE is a system where all the parts and aspects of education are focused on the outcomes of the course. The students take up courses with a certain goal of developing skills or gaining knowledge and they have to complete the goal by end of the course. Outcome-based education affirms teachers as facilitators, rather than lecturers. In this model, teachers guide the students and encourage them to develop their knowledge and skills. The under graduate programme at the Department of Economics, Sacred Heart College (Autonomous), Thevara provides a learning approach in which students develop analytical ability and critical thinking and research acumen over various economic and social issues.

1.2 Programme Outcome (PO)

The syllabus is framed in the Outcome Based Education (OBE) framework and the Programme Outcomes (POs) are given in the table below:

Programme Outcomes (POs)
PO1- Critical Thinking and deep domain knowledge
PO2- Effective Communication
PO3- Contributes to nation building
PO4- Care for environment
PO5- Ethical values
PO6- Global Perspective

1.3 Eligibility for Admission

The candidate must have passed the Class-XII or Plus 2 from a recognized board. Academic eligibility should be satisfied as on the last date of submission of academic data. In the case of candidates who have passed examinations of other Boards/Institutes/Governments, except CBSE/ICSE, they shall be admitted only if these examinations have been declared equivalent to the qualifying examinations of Mahatma Gandhi University.

1.4 Acknowledgement

There are many profound personalities whose relentless support and guidance made this syllabus restructuring a success. The Department of Economics express sincere appreciations to all those who were part of this endeavor. Our sincere gratitude to all the members of the Board of Studies, including the faculty members of the Department and the external academicians who did a marvelous work in course restructuring and the syllabus revision process.

2. REGULATIONS FOR CHOICE BASED CREDIT AND SEMESTER SYSTEM (CBCSS) FOR   UNDER GRADUATE PROGRAMMES -2023

Preamble

Sacred Heart College, Thevara became an autonomous college under Mahatma University Kottayam in 2014. Since then, academic programmes of the college are being conducted as per the curriculum and syllabus approved by the various Boards of studies and the academic council of the college. The college revised the syllabi of the under graduate(UG) programmes in 2015-16 and 2019-20. The curriculum and syllabus under the choice based credit and semester system (CBCSS) for the under graduate programmes effective from 2019-20 admissions offer Outcome Based Education (OBE). The new 'REGULATIONS   FOR CHOICE BASED CREDIT AND SEMESTER SYSTEM (CBCSS) FOR   UNDER GRADUATE PROGRAMMES -2023' is a continuation of the effort of the college for providing best education to the UG students of the college.

2.1 Title

These regulations shall be called **"SACRED HEART COLLEGE THEVARA REGULATIONS   FOR CHOICE BASED CREDIT AND SEMESTER SYSTEM (CBCSS) FOR   UNDER GRADUATE PROGRAMMES - 2023**

 2.2 Scope

Applicable to all under graduate (UG) programmes of the college with effect from 2023 admissions onwards, except otherwise approved by the Academic Council of the College

2.3. Definitions

i. '**Programme**' means the entire course of study and examinations.

ii. 'Duration **of Programme'** means the period of time required for the conduct of the programme. The duration of under graduate programmes shall be 6 semesters, post-graduate programme shall be of 4 semesters and M Phil programmes shall be 2 semesters.

iii. **'Semester'** means a term consisting of a minimum of 90 working days, inclusive of examination, distributed over a minimum of 18 weeks of 5 working days, each with 5 contact hours of one hour duration

iv. **'Course'** means a segment of subject matter to be covered in a semester. Each Course is to be designed variously under lectures / tutorials / laboratory or fieldwork / study tour /seminar /

project / practical training / assignments/evaluation etc., to meet effective teaching and learning needs.

v.   '**Common Course I**' means a course that comes under the category of courses for English and '**Common Course II**' means additional language, a selection of both is compulsory for all students undergoing undergraduate programmes(Model I)

vi.   '**Core course**' means a course in the subject of specialization within a degree programme.

vii.   '**Complementary Course**' means a course which would enrich the study of core courses.

viii.   '**Open course**' means a course outside the field of his/her specialization, which can be opted by a student.

ix.   '**Additional core course**' means a compulsory course for all under graduate students (as per the UGC directive) to enrich their general awareness.

x.   The U.G. programmes shall include (a) Common courses (b) Core courses (c) Complementary Courses (d) Open Course (e) Study tour and (f) Internship for selected programmes.

xi.   '**Additional Course**' is a course registered by a student over and above the minimum required courses.

xii.   '**Credit' (Cr)** of a course is the numerical value assigned to a course according to the relative importance of the content of the syllabus of the programme.

xiii.   '**Extra credits**' are additional credits awarded to a student over and above the minimum credits required for a programme for achievements in co-curricular activities carried out outside the regular class hours OR curricular activities/courses completed for value addition, as directed by the College/ department. It is the numerical value assigned to Club activities, Social service, Internship, add on courses etc. which is not added with the total academic credits of the students. Additional credit components

(a)   Talent & career club activity (optional)

(b)   Social service (mandatory)

(c)   Internship for Commerce, Communication and Computer applications (mandatory).

(d)   Internship (desirable for other programmes).

(e)   Add on courses (optional)

xiv.   '**Programme Credit**' means the total credits of the UG Programme.

xv. **'Programme Elective course'** Programme Elective course means a course, which can be chosen from a list of electives and a minimum number of courses is required to complete the programme.

xvi. **'Programme Project'** Programme Project means a regular project work with stated credits on which the student undergoes a project under the supervision of a teacher in the parent department / any appropriate Institute in order to submit a dissertation on the project work as specified.

xvii. **'Internship'** is on-the-job training for professional careers.

xviii. **'Plagiarism'** Plagiarism is the unreferenced use of other authors' material in dissertations and is a serious academic offence.

xix. **'Tutorial'** Tutorial means a class to provide an opportunity to interact with students at their individual level to identify the strength and weakness of individual students.

xx. **'Seminar'** seminar means a lecture by a student expected to train the student in self-study, collection of relevant matter from the books and Internet resources, editing, document writing, typing and presentation.

xxi. **'Evaluation'** means every course shall be evaluated by 25% continuous (internal) assessment and 75% end course/end semester (external) assessment.

xxii. **'Repeat course'** is a course that is repeated by a student for having failed in that course in an earlier registration.

xxiii. **'Audit Course'** is a course for which no credits are awarded.

xxiv. **'Department'** means any teaching Department offering a course of study approved by the college / Institute as per the Act or Statute of the University.

xxv. **'Parent Department'** means the Department which offers a particular UG/PG programme.

xxvi. **'Department Council'** means the body of all teachers of a Department in a College.

xxvii. **'Faculty Advisor'** is a teacher nominated by a Department Council to coordinate the continuous evaluation and other academic activities undertaken in the Department.

xxviii. **'College Co-ordinator** means a teacher from the college nominated by the College Council to look into the matters relating to CBCSS

xxix. **'Letter Grade'** or simply **'Grade'** in a course is a letter symbol (O, A, B, C, D, etc.) which indicates the broad level of performance of a student in a course.

xxx. Each letter grade is assigned a **'Grade point'** (GP) which is an integer indicating the numerical equivalent of the broad level of performance of a student in a course.

xxxi.   **'Credit point'** (CP) of a course is the value obtained by multiplying the grade point (GP) by the Credit (Cr) of the course CP=GP x Cr.

xxxii. '**Semester Grade point average'** (SGPA) is the value obtained by dividing the sum of credit points (CP) obtained by a student in the various courses taken in a semester by the total number of credits taken by him/her in that semester . The grade points shall be rounded off to two decimal places. SGPA determines the overall performance of a student at the end of a semester.

xxxiii. **Cumulative Grade point average'** (CGPA) is the value obtained by dividing the sum of credit points in all the courses taken by the student for the entire programme by the total number of credits and shall be rounded off to two decimal places.

xxxiv. '**Grace Marks'** means marks awarded to course/s, as per the orders issued by the college from time to time, in recognition of meritorious achievements in NCC/NSS/Sports/Arts and cultural activities.

2.4 ATTENDANCE

Being a regular college, physical presence in the regular activities, especially, classes and exams, is mandatory for the students. However, if a student secures 75% of attendance s/he is eligible to appear for the exams, provided there are no other impediments like disciplinary proceedings, malpractice record etc.

i.   A maximum of 5 marks (5%) for a course is given for attendance

ii.   **Absence:** A student found absent for one hour in the forenoon or afternoon session is deprived of the attendance for the entire session as far as eligibility for final exam is concerned.

iii. The hour related calculation in a course is meant for awarding marks for the course concerned.

iv.   **Late entry**: A student is supposed to be in time in the class. Late arrival related treatment is left to the discretion of the individual teacher. However, as a norm, a late arriving student may be permitted to the class, if it is not inconvenient or distraction to the class as such; though attendance MAY NOT BE GIVEN. Late arrival beyond 5 minutes is treated as ABSENCE; though the teacher may consider permitting the student to sit in the class.

v.   **Leave** : A student has to formally report his/her absence with reasons either in advance, or immediately after the absence for obtaining an approved leave. This applies to all sorts of leave – medical, on duty or other.

vi.   The student is supposed to report in prescribed format on the very next day of the absence; however, upto a week's time is permitted. Afterwards, the leave applications will not be considered.

vii. The student has to retain a copy/section of the approved leave form and produce the same as proof, in case there is any confusion regarding the leave sanctioning. In the absence of such proof, the claims will not be entertained.

viii. **Duty Leave**: A student representing the college in sports, arts, social service or academic matters, has to get sanction from the class teacher concerned and submit the leave application form duly endorsed by teacher concerned & the class teacher, and submit it to the faculty Dean (or Vice Principal). The same will be forwarded by the Dean/Vice Principal for attendance entry. **SPORTS**: The approval of the Department of Physical Education and the class teacher is required. The time limit for submission mentioned above is applicable in the case of duty leave as well.

ix. **CONDONATION**: a student may have the privilege of condonation of attendance shortage (upto a maximum of 10 days) on the basis of genuineness of the grounds of absence (medical reasons or college duty), duly recommended by the department. This is not a matter of right. It is a matter of privilege based on Principal's discretion and the good conduct of the student on the campus. A student of UG programme may have a maximum of two such opportunities.

x. **RE-ADMISSION** – a student whose attendance is inadequate will have to discontinue the studies. Such students, whose conduct is good, may be re-admitted with the approval of Governing Body, on the basis of recommendation from the department, and assurance from the student and the guardian regarding good conduct and compliance in academic and discipline matters. For this the prescribed re-admission fee has to be paid.

As a condition for re-admission, the student should have cleared all academic arrears, or should have appeared for the exams in which he/she is having an arrear (if the results are not out), and should have fulfilled all academic assignments prescribed by the department for compensating for his lack of attendance.

xi. **UNAUTHORISED ABSENCE & REMOVAL FROM ROLLS**: A student absent from the classes continuously for 10 consequent days without intimation or permission, shall be removed from the rolls, and the matter intimated to the student concerned. On the basis of recommendation of the department concerned, re-admission process may be permitted by the Principal.

2.5 PROGRAMME REGISTRATION

i. A student shall be permitted to register for the programme at the time of admission.

ii. A UG student who registered for the programme shall complete the same within a period of 12 continuous semesters from the date of commencement of the programme.

2.6 PROMOTION: A student who registers for the end semester examination shall be promoted to the next semester. However, in extreme circumstances, a student having sufficient attendance who could not register for the end semester examination may be allowed to register notionally by the Principal with the recommendation of the Head of the department concerned and , by paying the prescribed fee.

2.7 UNDER GRADUATE PROGRAMME STRUCTURE

Model I BA/B.Sc.

a	Programme Duration	6 Semesters
b	Total Credits required for successful completion of the Programme	120
c	Credits required from Common Course I	22
d	Credits required from Common Course II	16
e	Credits required from Core course and Complementary courses including Project	79
f	Open Course	3
g	Minimum attendance required	75%

Model I/II B.Com

a	Programme Duration	6 Semesters
b	Total Credits required for successful completion of the Programme	120
c	Credits required from Common Course I	14
d	Credits required from Common Course II	8
e	Credits required from Core and Complementary/ Vocational courses including Project	95
f	Open Course	3
g	Minimum attendance required	75%

Model II BA/B.Sc.

a	Programme Duration	6 Semesters
b	Total Credits required for successful completion of the Programme	120
c	Credits required from Common Course I	16
d	Credits required from Common Course II	8
e	Credits required from Core + Complementary + Vocational Courses including Project	93
f	Open Course	3
g	Minimum attendance required	75%

Model III BA/B.Sc./B.Com

a	Programme Duration	6 Semesters
b	Total Credits required for successful completion of the Programme	120
c	Credits required from Common Course I	8
d	Credits required from Core + Complementary + Vocational Courses including Project	109
e	Open Course	3
f	Minimum attendance required	75%

2.8 EXAMINATIONS

All the End Semester Examinations of the college will be conducted by the Controller of Examination. The Principal will be the Chief Controller of Examinations. An Examination committee consists of the Chief Controller of Examinations, Controller of Examinations, Additional Chief Superintendent, Deans, IQAC Coordinator and other faculty members nominated by the Principal will act as an advisory body of the matters relating to the conduct of examinations.

2.9. EVALUATION AND GRADING

The evaluation scheme for each course shall contain two parts;

      a. Continuous Internal Evaluation (CIA) and

      b. End Semester Examination (ESE).

The internal to external assessment ratio shall be 1:3, for both courses with or without practical except for (i) BA Animation and Graphics (ii) BA Animation and Visual effects and (iii) BBA. For courses without practical, there shall be a maximum of 75 marks for external evaluation and maximum of 25 marks for internal evaluation. For courses with practical, generally external evaluation shall be for a maximum of 60 marks and internal evaluation for 20 marks. Both internal and external evaluation shall be carried out in the mark system and the marks are to be rounded to the nearest integer.

The internal to external assessment ratio for BA Animation and Graphics, BA Animation and Visual effects and BBA shall be decided by the respective Board of studies subject to a minimum of 60 marks for external examinations.

2.9.1. Continuous Internal Assessment (CIA)/ Continuous Assessment: The internal evaluation shall be based on predetermined transparent system involving periodic written tests, assignments, seminars/viva/field survey and attendance in respect of theory courses and based on written tests, lab skill/records/viva and attendance in respect of practical courses. The marks assigned to various components for internal evaluation as follows.

Components of Internal Evaluation (for theory without practical)

	Components	Marks
i.	Assignments	5
ii	Seminar/Quiz/Field survey /Viva etc.	5
iii	Attendance	5
iv	Two Test papers(2x5)	10
	Total	25

i. **Assignments**: Every student shall submit one assignment as an internal component for every course.

Components	Marks
Punctuality	1
Content	2
Conclusion	1
Reference/Review	1
Total	**5**

ii. **Seminar**: The seminar lecture is expected to train the student in self-study, collection of relevant matter from the books and Internet resources, editing, document writing, typing and presentation. ·

Components	Marks
Content	2
Presentation	2
Reference/Review	1
Total	**5**

iii. **Evaluation of Attendance**

The attendance of students for each course shall be another component of internal assessment.

% of attendance	Mark
Above 90%	5
Between 85 and below 90	4
Between 80 and below 85	3
Between 76 and below 80	2
Between 75 and below 76	1

Components of Internal Evaluation (for theory with practical)

Components of Theory – Internal Evaluation	Marks
Attendance	5
Seminar/ Assignment (Written assignments, preparation of models, charts, posters etc., field survey, field work)	5
Test paper(s)	10
Total	20

Components of Practical- Continuous internal assessment

Components	Marks
Attendance and Lab involvement	2
Record	2
Viva/Model Exam	1
Total	5

iv. **Class Tests:** Every student shall undergo **two class tests** as an internal component for every course.

2.9.2 End Semester Examination (ESE): The End Semester Examination in theory courses shall be conducted by the college with question papers set by external experts/ question bank. The evaluation of the answer scripts shall be done by the examiners based on a well-defined scheme of evaluation given by the question paper setters/Prepared as per the direction of the Chairman, Board of Examiners. The evaluation of the End Semester Examinations shall be done immediately after the examination preferably through the centralised valuation.

2.9.3 Project

Project work is a part of the syllabus of most of the programmes offered by the college. The guidelines for doing projects are as follows:

i. Project work shall be completed by working outside the regular teaching hours.

ii. Project work shall be carried out under the supervision of a teacher in the concerned department or an external supervisor.

iii. A candidate may, however, in certain cases be permitted to work on the project in an industrial / Research Organization/ Institute on the recommendation of the Supervisor.

iv. There should be an internal assessment and external assessment for the project work in the ratio 1:3

v. The external evaluation of the project work consists of valuation of the dissertation (project report) followed by presentation of the work and viva voce.

vi. The mark and credit with grade awarded for the program project should be entered in the grade card issued by the college.

Components of Internal Evaluation for Projects

Components	Marks
Topic/Area selected	2
Experimentation/Data collection	5

Punctuality-Regularity	3
Compilation	5
Content	5
Presentation	5
Total	**25**

2.9.4 Comprehensive Viva-voce

Comprehensive Viva-voce shall be conducted at the end of the programme, which covers questions from all courses in the programme as per the syllabus.

2.10. Grade and Grade Points

For all courses (theory & practical), Letter grades and grade point are given on a 10-point scale based on the total percentage of marks, (CIA+ESE) as given below:-

Percentage of Marks	Grade	Grade Point (GP)
95 and above	S Outstanding	10
85 to below 95	A^+ Excellent	9
75 to below 85	A Very Good	8
65 to below 75	B^+ Good	7
55 to below 65	B Above Average	6
45 to below 55	C Average	5
35 to below 45	D Pass	4
Below 35	F Fail	0
	Ab Absent	0

Grades for the different semesters and overall programme are given based on the corresponding SGPA/CGPA as shown below:

SGPA/CGPA	Grade
Equal to 9.5 and above	*S Outstanding*
Equal to 8.5 and below 9.5	*A+ Excellent*
Equal to 7.5 and below 8.5	*A Very Good*
Equal to 6.5 and below 7.5	*B+ Good*
Equal to 5.5 and below 6.5	*B Above Average*
Equal to 4.5 and below 5.5	*C Average*
Equal to 4.0 and below 4.5	*D Pass*
Below 4.0	*F Failure*

A separate minimum of 30% marks each for internal and external (for both theory and practical)

and aggregate minimum of 35% are required for a pass for a course. A candidate who has not secured minimum marks/credits in internal examinations can re-do the same registering along with the end semester examination for the same semester, subsequently. A student who fails to secure a minimum marks/grade for a pass in a course can be permitted to write the examination along with the next batch.

After the successful completion of a semester, Semester Grade Point Average (SGPA) of a student in that semester is calculated using the formula given below. For the successful completion of semester, a student should pass all courses and score at least the minimum CGPA grade **'D'**. However, a student is permitted to move to the next semester irrespective of her/his SGPA.

Credit Point (CP) of a course is calculated using the formula
CP = Cr x GP, where Cr = Credit; GP = Grade point
Semester Grade Point Average (SGPA) of a Semester is calculated using the formula
SGPA = TCP/TCr, where
TCP = Total Credit Point of that semester $= \sum_1^n CP_i$;
TCr = Total Credit of that semester $= \sum_1^n Cr_i$
Where n is the number of courses in that semester
Cumulative Grade Point Average (CGPA) of a Programme is calculated using the formula
CGPA $= \dfrac{\sum(SGPA \times TCr)}{\sum TCr}$

SGPA/CGPA shall be round off to two decimal places

To ensure transparency of the evaluation process, the internal assessment marks awarded to the students in each course in a semester shall be published on the notice board/website at least one week before the commencement of external examination. There shall not be any chance for improvement for internal mark.

The course teacher and the faculty advisor shall maintain the academic record of each student registered for the course which shall be forwarded to the controller of examinations through the Head of the Department and a copy should be kept in the department for at least two years for verification.

2.11.   Registration for the examination

a.   All students admitted in a programme with remittance of prescribed fee are eligible for the forthcoming semester examinations.

b.   Online application for registration to the various End Semester Examinations shall be forwarded to the CE along with prescribed fee for each course in prescribed format.

c. The eligible candidates who secure the prescribed minimum attendance of the total duration of the course and possess other minimum qualification prescribed in the regulations for each course shall be issued the hall tickets. The hall ticket shall be downloaded by the students from the college website.

d. The mode of fee remittance shall be through the prescribed bank.

2.12. Supplementary Examinations

Candidates who failed in an examination can write the supplementary examination conducted by the College along with regular examinations.

2.13. Improvement of Examination

A candidate can improve his/her marks once by appearing again for the examination with the subsequent batch with the remittance of prescribed fee. In such cases the better of the two marks shall be taken as the marks awarded to him.

Internal assessment marks shall be carried over to the subsequent semester examination.

There shall not be any provision for improving internal assessment marks.

2.14. Promotion to the Next Higher Semester

A candidate shall be eligible for promotion from one semester to the next higher semester if,

a. He / she secures a minimum 75 % attendance and registered for the End Semester Examination of the programme for which he/she is studying.

b. His / her progress of study and conduct are satisfactory during the semester completed, as per the assessments recorded by the course teachers and the Head of the Department concerned.

2.15 Certificates

1. Degree certificates are issued by the Mahatma Gandhi University, Kottayam as per the act and statues of the University on the submission of the consolidated mark / score cards of the students by the College.

2. A consolidated mark / scored card shall be issued to the candidates after the publication of the results of the final semester examination taken by the candidate.

3. A Course Completion Certificate with classification shall be issued to students till the provisional certificate is issued by the university.

2.16. Award of Degree

The successful completion of all the courses with 'D' grade shall be the minimum requirement for the award of the degree.

2.17. Monitoring

There shall be a Monitoring Committee constituted by the principal consisting of faculty advisors, HoD, a member from teaching learning evaluation committee (TLE) and the Deans to monitor the internal evaluations conducted by college. The Course teacher, Class teacher and the Deans should keep all the records of the internal evaluation, for at least a period of two years, for verification.

Every Programme conducted under Choice Based Credit System shall be monitored by the College Council under the guidance of IQAC Coordinator, Controller of Exams, academic deans and HoDs.

2.18. Grievance Redressal Mechanism

In order to address the grievance of students regarding Continuous internal assessment (CIA) a three-level Grievance Redressal mechanism is envisaged. A student can approach the upper level only if grievance is not addressed at the lower level.

Level 1: At the level of the concerned course teacher

Level 2: At the level of a department committee consisting of the Head of the Department, a coordinator of internal assessment for each programme nominated by the HoD and the course teacher concerned.

Level 3: A committee with the Principal as Chairman, Dean of the Faculty concerned, HOD of the department concerned and one member of the Academic council nominated by the principal every year as members.

3. SYLLABUS

3.1 PROGRAMME SPECIFIC OUTCOME (PSO)

The Program Specific Outcomes (PSOs) are listed in the following table:

Programme Specific Outcomes (PSOs)
PSO1- Understands and communicates the functions and behavior of economic agents at Micro and Macro Economic levels.
PSO2-Identifies the areas where market mechanism is supplemented, modified and supplanted by government.
PSO3- Evaluates the economic relationship among different countries of the world.
PSO4-Understands the interaction between economy and environment and the need to obtain balance between them.
PSO5- Constructs various types of indices and measurements such as index numbers, national income, central tendency, dispersion etc.
PSO6- Prepares questionnaires, conducts surveys, tabulates and presents the data in graphs charts etc.

3.2 PROGRAMME STRUCTURE FOR B.A. ECONOMICS

SI. No.	Course	Course Category	Course Stream	Hours per Week	Credit
		SEMESTER I			
1	Homo Loquens: Effective Listening and Speaking	Common Course -1	English	5	4
2	Pearls from the Deep	Common Course-1	English	4	3
3	Additional Language I	Common Course- 2	Additional Language	4	4
4	Methodology and Historical Perspectives	Core	Economics	6	4

	of Economics				
5	Historical Currents of the Modern World	Complementary	History	6	4
			Total	25	19
SEMESTER II					
6	Text and Context: A Guide to Effective Reading and Writing	Common Course -1	English	5	4
7	Savouring the Classics	Common Course -1	English	4	3
8	Additional Language II	Common Course- 2	Additional Language	4	4
9	Microeconomics I	Core	Economics	6	5
10	Economic History of Modern India	Complementary	History	6	4
			Total	25	20
SEMESTER III					
11	Scripting the Nation: Readings on Indian Polity, Secularism and Sustainability	Common Course -1	English	5	4
12	Additional Language III	Common Course- 2	Additional Language	5	4
13	Microeconomics II	Core	Economics	4	4
14	Economics of Growth and Development	Core	Economics	5	4
15	An Introduction to Concepts in Political Science	Complementary	Political Science	6	4
			Total	25	20
SEMESTER IV					
16	Illuminations	Common Course -1	English	5	4
17	Additional Language IV	Common Course- 2	Additional Language	5	4
17	Macroeconomics I	Core	Economics	5	4
19	Public Economics	Core	Economics	4	4
20	Indian Polity – Governmental Machinery and Processes	Complementary	Political Science	6	4
			Total	25	20

SEMESTER V

21	Quantitative Techniques for Economic Analysis – I	Core	Economics	6	4
22	Macroeconomics II	Core	Economics	5	5
23	Open Course*	Open Course	Open Course	4	3
24	Environmental Economics	Core	Economics	5	4
25	Modern Banking	Core	Economics	5	4
			Total	25	20

SEMESTER VI

26	Quantitative Techniques for Economic Analysis – II	Core	Economics	6	4
27	International Economics	Core	Economics	5	4
28	Elective**	Core	Economics	4	3
29	Introductory Econometrics	Core	Economics	5	4
30	Indian Economy	Core	Economics	5	4
31	Project	Core	Economics	-	2
			Total	25	21

*One course to be selected from the list of Open Courses offered by the college

** One Course from the following elective courses:

1. Economics of Financial Markets

2. Health Economics

3. Mathematical Economics

4. Behavioral Economics

3. 3 Syllabi of Core Courses

SEMESTER 1

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
01	23U1CRECO1	**Methodology and Historical Perspectives of Economics**	4	108

Course Outcome

	Course Outcome	POs/PSO	CL	Class Sessions
CO1	Understand the broad contours of Economics, its methodologies, tools and analytic procedures.	PSO1, PSO4	U	20
CO2	Getting familiarised with the basic concepts and terminology of Economics	PSO1, PSO4	U	30
CO3	Understand the roots of economic thought and practices in the modern economic world.	PSO1, PSO2	U	38
CO4	Acquiring the basic knowledge of research methodology	PSO4	A	20
	TOTAL HOURS OF INSTRUCTION			108

Note: R-remember U-Understand, A - Applies An-Analyses, E-Evaluates, Cr- Creates

MODULE I: Methodology of Social Science

Social Science and its emergence - different disciplines of social science – Basic principles and concepts in Social Science (Positivism, empiricism, rationalism, institutionalism, behaviorism, utilitarianism, modernism and post modernism) - Need for interdisciplinary approach - Objectivity and subjectivity in Social Science - Limits to objectivity in social science. (20hrs)

MODULE II: Methodology and Concepts of Economics

Economics as a social science – Definition and meaning - Subject matter and scope of Economics, Pure and Applied, Positive and Normative Economics, Economic theory and Economic laws, Micro and Macro Economics, Role of assumptions in

Economics, Method and Methodology - Deductive and inductive methodology, Economic Models. Various Concepts: Function, Variable, Equilibrium - Partial and General, Static, Comparative static and Dynamic – Economic value: nominal and real value.   (30hrs)

MODULE III: Research Methodology

Meaning and objectives of research – Types of research –Research process: Conceptualization of research issues, reviewing the literature, Hypothesis, Important methods of data collection - primary and secondary-analysis and presentation of data, writing a research report.   (20hrs)

MODULE IV: Major Schools of Economic Thought

A. Mercantilism - meaning and characteristics – Physiocrats - Natural order-primacy of agriculture - Tableau Economique.

B. Basic postulates of Classical and Neo-Classical economic thought: Adam Smith - laisssez fair - division of labour, theory of value - value in use and value in exchange, economic progress-absolute advantage theory - canons of taxation. David Ricardo - Theory of value-views on distribution - theory of rent-stationary state - comparative advantage. Thomas R. Malthus - Theory of population, Theory of Glut. Jeremy Bentham - basic profile of his economic ideas. J.B. Say - doctrine of immaterial products - law of markets. J.S. Mill - basic profile. Alfred Marshall - Utility and demand-consumer surplus - elasticity of demand - quasi rent - representative firm. A. C. Pigou - Welfare economist. Leon Walras - General equilibrium analysis.

C. Socialism – an overview - Marxist Economic Thought - Karl Marx - Materialistic interpretation of history, Dialectical materialism, Labour theory of value - surplus value-organic and value composition of capital - Industrial reserve Army - Class war- Crisis of capitalism.

D. Keynesianism - Keynes as a critique of classical Economics. Post - Keynesian developments: Milton Friedman and Paul Samuelson (Concepts only).

E. Indian Economic Thought: Kautilya - Arthashastra. Dadabhai Naoroji - national income accounting - Drain theory. Mahatma Gandhi - non-violent economy - decentralisation of cottage industries - development of Khadi industry - Village Sarvodaya - Trusteeship doctrine - bread labour. Contributions of Amartya Sen - Abhijith Banerjee (Overview only).   (38 hrs)

References

1. Baumol, William J and Alan Blinder (2010): Economics: principles and Policy, 13th edition, South Western Cengage Learning, New Delhi.

2. Blaug, M (1998): The Methodology of Economics, Cambridge Surveys of Economic Literature, New York.

3. Boland, Lawrence A. (2000): The Methodology of Economic Model Building Methodology after Samuelson, Routledge, London and New York.

4. Dasgupta, Manas (2007): Research Methodology in Economics: Problems and Issues, Deep & Deep Publications, New Delhi.

5. Eric Roll (1956): AHistoryofEconomicThought,3rd edition, Prentice Hall, New Jersey.

6. Guthrie, Gerard (2010): Basic Research Methods- an entry to social science research, Sage publications, New Delhi.

7. Hajela, T N (2015): History of Economic Thought, 18th edition, Ane Books, New Delhi.

8. Haney, Lewis H(1920):History of Economic Thought, Mc Milan, New York

9. Hunt, E.K and Mark Lautzenheiser (2011): History of Economic Thought: A Critical Perspective, 3rd ed, Prentice Hall of India, New Delhi.

10. Kothari,C. R. (2010) : Research Methodology – Methods and Techniques, Rev edition, New Age Techno PressNew Delhi

11. Krishna Swami, O P and M Ranganathan (1993): Methodology of Research in Social Sciences, Himalaya Publishing House, New Delhi.

12. Wilkinson and Bhandarkar (1990): Methodology and Techniques of Social Research, Himalaya Publishing House, New Delhi.

13. Young, P.V (1984): Scientific Social Survey and Research, Prentice Hall, New Delhi.

SEMESTER- II

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
2	23U2CRECO2	**Microeconomics - I**	5	108

Course Outcome

	COURSE OUTCOME	POs/PSOs	CL	Class sessions
CO1	Understands the basics of micro economics and the related concepts	PO1, PSO1	U	15
CO2	Develops understanding of various aspects of demand, supply and the concept of elasticity.	PO1, PSO1	U	25
CO3	Understand the various theories of consumer behaviour.	PO1, PSO1	U	28
CO4	Develops knowledge on production theories and the applicability of various production functions	PO1, PSO1	A	20
CO5	Understands various cost concepts and attain knowledge to compare the traditional & modern theories of cost	PO1, PSO1	An	20
Total hours of instruction				108

Note: R-remember U-Understand, Ap- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I −Introduction to Micro Economics

Definitions of economics - Micro-macro distinction - Nature and scope of micro economics, Central problems of an economy – scarcity and choice – production possibility frontier – Functions of an economic system – short run and long run analysis, partial and general equilibrium analysis - Micro economic policy goals: efficiency and equity – microeconomic models – assumptions and reality – ceteris paribus assumption – marginal concept in microeconomics.   (15 hrs.)

Module II -Demand and Supply Analysis

Demand analysis: Law of Demand, Demand Determinants – individual and market demand – Demand function measurement and application - changes and shifts in demand – Exceptions to law of demand: Giffen goods, Veblen goods, highly essential commodities, snob appeal. Market

demand and elasticity- Types and degrees of price elasticity –Arc and point elasticity (geometric and arithmetic) Income elasticity of demand – cross elasticity.

Supply analysis: supply schedule and supply curve– changes and shifts in supply - elasticity of supply - measurement and application. Seller's view – Revenues – total, average and marginal revenue and price elasticity – market equilibrium and impact of changes in demand and supply-dynamic demand and supply model: Cobweb. Applications of demand & supply: price rationing, floor price.   (25 hrs.)

Module III - Theory of Consumer Behaviour

Consumer preference and choice – utility – total and marginal utility – cardinal and ordinal utility. Analysis of consumer behaviour - law of diminishing marginal utility – law of equi-marginal utility – consumer equilibrium under cardinal utility.

Ordinal utility analysis – indifference curve analysis – properties – Marginal Rate of Substitution – consumer's income and price constraints: budget line - response to changes in price and income under ordinal utility analysis. Application: water – diamond paradox and consumers surplus; Marshall and Hicks. Income effect and Engel curve – price effect and demand curve – substitution effect – splitting (decomposition) price effect into income and substitution effects: Hicksian and Slutsky approaches – criticisms of ordinal utility approach.

Behaviourist approach - Revealed preference theorem of Samuelson – derivation of demand curve – distinction between weak and strong ordering. New approaches to consumer theory – pragmatic approach & Linear Expenditure System (concepts only)   (28 hrs.)

Module IV - Theory of Production

Production – production function – total, marginal and average product – Time element in production function – Law of variable proportions – three stages. Law of returns to scale – Isoquants – properties, MRTS – Isocost line – production decision – optimal input combination – producers' equilibrium – expansion path – Economies and diseconomies of scale – internal and external economies - empirical production function: Cobb-Douglas production function – its properties.   (20 hrs.)

Module V -Cost Analysis

Theory of costs – traditional theory of costs –short run and long run – accounting and

economic concepts of cost – real cost and money cost, explicit and implicit cost – sunk cost – fixed cost – variable cost – total cost – average cost – marginal cost – reasons for the U shape of the average cost curve – short run and long run analysis of costs – envelope curve –Modern theory of cost – L shaped and saucer shaped curves.

(20 hrs.)

References

i. A. Koutsoyiannis, (1979), Modern Micro Economics, Palgrave Mc Millan

ii. Dominick Salvatore, Micro Economics – Theory and Application 4 th ed., Oxford University Press, New Delhi.

iii. Robert S. Pindyck, et al., (recent edition) Micro Economics – Pearson Education, Delhi.

iv. G.S. Maddala and Ellen Miller (2004), Micro Economics - Theory and Applications, Tata McGraw Hill, Delhi

SEMESTER- III

Core Course No.	Course Code	Course Title	No. of Credits	No.of Contact hours
3	23U3CRECO3	**Microeconomics - II**	4	72

Course Outcome:

	COURSE OUTCOME	POs/PSOs	CL	Class Sessions
CO1	Able to understand the structure and functioning of the market system and those factors which distort the markets.	PO1, PSO1, PSO2	U	20
CO2	Become able to evaluate the factors which affect the markets and suggest policy resolutions.	PO1, PSO1, PSO2	E	17
CO3	Analyse the factors which determine the remuneration of various factors of production in various market conditions.	PO1, PSO1, PSO2	An	20
CO4	Develops an understanding of various aspects to be considered while taking social and economic decisions.	PO1, PSO1	E	15
	TOTAL HOURS OF INSTRUCTION			72

Note: R-remember U-Understand, A-Applies, An-Analyses, E-Evaluates, Cr- Creates

Module I -Firms & Market Structure

Market –structure -Perfect and imperfect markets – perfect competition - characteristics –firm & industry –short run and long run equilibrium of a firm and industry –derivation of supply curve-shutdown point. Imperfect market – monopoly – features –short run and long run - discriminating monopoly -price discrimination - price and output determination under discriminating monopoly – Measuring monopoly power – Lerner Index – social cost of monopoly - degrees and types of price discrimination–dumping–bilateral monopoly–Monopsony. (20 hrs.)

Module II – Monopolistic Competition & Oligopoly

Monopolistic competition – non-price competition and selling costs -short run and long run (group) equilibrium. Ideal output and excess capacity – wastages of monopolistic competition.

Oligopoly – Nature of oligopoly – price stickiness – kinked demand curve -collusive oligopoly – cartels and price leadership – low-cost firm – dominant and barometric – Duopoly – market with asymmetric information (concept only)   (17 hrs.)

Module III -Factor Pricing and Distribution

Functional versus personal distribution -concepts of total physical product (TPP) APP – VMP –MRP –marginal productivity theory of distribution product exhaustion theory-factor price distribution under perfect competition and imperfect competition-Ricardian and modern theories of rent – quasi rent –money and real wages – wage differentials – effect of labour unions on wages– theories of interest – classical, neo classical & Keynesian- theories of profit- dynamic theory-risk bearing theory– innovation theory of profit.   (20 hrs.)

Module IV -Welfare Economics

Edgeworth Box diagram –contract curve -Criteria of social welfare –growth of GNP as a criterion of welfare –Bentham criterion –cardinalist criterion -Pareto optimality criterion –Kaldor and Hicks compensation criterion –Arrow's impossibility theorem – Social welfare function of Bergson and Samuelson (concept only) – Amartya Sen's concept of social welfare.   (15 hrs.)

Books for Reference

1. A. Koutsoyiannis, (1979), Modern Micro Economics, Palgrave McMillan
2. Dominick Salvatore, Micro Economics – Theory and Application 4 th ed., Oxford University Press, New Delhi.
3. Robert S. Pindyck, et al., (recent edition) Micro Economics – Pearson Education, Delhi.
4. G.S. Maddala and Ellen Miller (2004), Micro Economics - Theory and Applications, Tata McGraw Hill, Delhi

SEMESTER III

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
4	23U3CRECO4	Economics of Growth and Development	4	90

Course Outcome:

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	Evaluate the major Indices of development and under development	PO1, PO2, PSO5	E
CO 2	Analyse the major theories of economic development and under development	PO1, PO2, PSO1	An
CO 3	Analyse the role of various factors contributing to development as well as the impediments to development	PO1, PO2, PSO1, PSO2	An
CO 4	Explains the major issues in economic development	PO1, PO2, PSO1	U

Note: R-remember U-Understand, A-Applies, An-Analyses, E-Evaluates, Cr- Creates

Module I: Introduction to Economics of Growth and Development

Growth and Development – meaning – distinction – determinants and indicators- measurement of development – Income and non-income indices – GDP, PCI, PQLI, HDI, HPI, GEM – (GDI, GNH)- Development as freedom – Development as Liberation – Sen's capability approach – poverty as capability and Entitlement failure – multidimensional poverty index – poverty – absolute and relative – inequality of income and wealth – Gini coefficient – Lorenz curve Kuznet's inverted 'U'- Hypothesis – Development gap. (22hrs)

Module II: Approaches to Development

Approaches to Economic Development: Structuralist – dependency - market- friendly approaches (concepts only) – vicious circle of poverty – Stage theory of Rostow – low level equilibrium trap – Critical minimum effort thesis – Big push – Lewis model – balanced vs unbalanced growth strategy – Dualistic theories.   (23hrs.)

Module III: Theories and Factors in the Development Process

Classical – Marxian – Schumpeterian. Economic Development – role of agriculture – capital – technology – choice of technique - Trade and economic development–process of cumulative causation. (20hrs.)

Module IV: Human Resource and Development

Human Resource and Development – man power planning – concept of intellectual capital and its size – role of education and health in economic development – Education and health as joint investment for development – Gender and development – women in the labour force – optimum theory of population –theory of demographic transition – ageing and younging issues. (25 hrs.)

Books/Journals for Reference

1. Thirlwall, Growth and Development with Special Reference to Developing Countries. Palgrave McMillian, NewDelhi.
2. Benjamin Higgins (1968), Economic Development, Universal Book Stall, NewDelhi.
3. Meier G.M. (2007) Leading Issues in Economic Development, Oxford University Press, NewDelhi.
4. Todaro and Smith, Economic Development, Pearson Education, New Delhi.
5. Debraj Ray, Development Economics. Oxford University Press, NewDelhi.
6. Felix Raj and et. al, Contemporary Development Economics, New Central Book Agency (p)Ltd.

SEMESTER - IV

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
5	23U4CRECO5	**Macroeconomics-I**	4	90

Course Outcome

	COURSE OUTCOME	POs/PSOs	CL	Class Session
CO1	Develops the ability to compare and contrast micro and macroeconomics and understand the basics, importance, and applications of macroeconomics.	PO1/PSO1	A	20
CO2	Understands the contributions made by classical economics and analyze the relevance of those theories.	PO1/PSO1	E	20
CO3	Evaluates the transformation of the understanding of the economy based on macro variables.	PO1/PSO2	E	25
CO4	Able to demonstrate the Keynesian model of income determination and the equilibrium of money market and goods market.	PO2/PSO1	Ap	25
	Total hours of Instruction			90

Note: R-remember U-Understand, Ap- Applies An-Analyses, E-Evaluates, Cr- Creates

Module- I: Introduction–

Micro and Macro Economics - Main issues in Macro Economics – Statics, comparative statics, and dynamics – Circular flow of economic activity in a two-sector model – Variables – stock – flow - endogenous and exogenous - Macroeconomic models - Identities and equations. National Income – Concepts, Methods of measurement: Value-added, income and expenditure methods– Social accounting method –Limitations of national income accounting, Real and Nominal GNP -actual GNP and Potential GNP - Environmental concerns in national income accounts - Net Economic Welfare - Green GNP.   (20 hrs.)

Module-II: Classical Macro Economics:

Main postulates - Say's Law of Markets - Classical theory of Employment and output determination – Wage-price flexibility and full employment equilibrium – Classical theory of interest – Quantity Theory of money (Fisher's version) – Cash transactions and cash balance approach – Pigou effect – Neutrality of money – Classical Dichotomy. Keynes' criticism of Classical Theory.   (20hrs)

Module III: Keynesian Macroeconomics:

Keynesian macroeconomic system – Principle of effective demand (ASF &ADF) - Consumption function, psychological law of consumption – Factors determining consumption - Savings function – Graphical, algebraic, and numerical illustration and estimation of APC, MPC, APS, and MPS. The investment function Determinants of investment – MEC – MEI and the role of expectations.   (25 hrs.)

Module IV: Keynesian Model of Income Determination:

Two-sector Keynesian cross model of income determination and Keynesian Cross - Algebraic derivation Underemployment equilibrium - The effects of changes in autonomous investment on income multiplier analysis - static and dynamic multiplier - three-sector Keynesian Cross model - The effects of changes in taxes and public expenditure on income-Balanced budget multiplier - Four sector Keynesian Cross model - foreign trade multiplier.Two sector IS-LM model of income determination (model only).   (25hrs)

Readings

1. N.Gregory Mankiw(recent edition), Macro Economics, Worth Publications, NewYork
2. Richard T. Froyen (recent edition), Macro Economics - Theories and Policies, Pearson Education.
3. Shapiro, Edward (1982), Macro Economic Analysis, Galgotia Publications (reprint edition)
4. Sampat Mukerjee (2008), Analytical Macro Economics: From Keynes to Mankiw, New Central Book Agency, Calcutta.
5. Andrew B. Abel (2011), Macro Economics, Pearson, Delhi.

SEMESTER IV

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
6	23U4CRECO6	Public Economics	4	72

Course Outcome:

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	Identifies the areas of market failures and need for government intervention	PO1, PO2, PO3, PSO2	U
CO 2	Compares different sources of public revenue and evaluates the theories of taxation	PO1, PO2, PO3, PSO1, PSO2	U
CO 3	Analyse incidence and effects of taxation, expenditure and borrowing	PO1, PO2, PSO1, PSO2	An
CO 4	Evaluates fiscal aspects of federal system of government	PO1, PO3, PSO1, PSO2	E

Note: R-remember U-Understand, Ap- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I - INTRODUCTION TO PUBLIC ECONOMICS

Nature and scope of Public Economics – comparison of public and private finance –role of state in economic activities (allocation, distribution &stabilization functions) public goods vs private goods -conditions of efficiency –– free rider problem-Merit goods–principle of maximum social advantage. (18Hrs)

Module II - PUBLIC REVENUE

Public Revenue – Tax and Non-tax revenue – Taxes – canons of taxation –types of taxes – Income tax in India – Old and New Regimes - Goods and Service tax – GST and its impact- Rate structure- principles of taxation– benefit principle and ability to pay theory – impact and incidence of taxation – Effects of taxation –concept of taxable capacity – the Laffer curve – Budget and its role concepts of revenue account, capital account, gender budgeting, fiscal deficit, revenue deficit, primary deficit- zero base budgeting and rotating zero base budgeting-budgetary procedure. (18Hrs)

Module III - PUBLIC EXPENDITURE AND PUBLIC DEBT

Meaning – Canons of public expenditure – effects – theories of expenditure growth- Wagner's hypothesis Peacock- Wiseman hypothesis- development and non-development expenditure public debt – types – debt redemption – burden of public debt–public debt in India.   (18Hrs)

MODULE IV - FISCAL FEDERALISM

Meaning and Importance – vertical and horizontal equity in fiscal federalism - fiscal federalism in India – role of Finance commission –– report of latest finance commission-grants in aid- State Finance Commission and Panchayati Raj institutions.   (18Hrs)

Books/Journals for Reference

1. Harvey Rosen, (2008), Public Finance, McGraw Hill, New York.
2. Bernard P. Herber, Modern Public Finance (Richard Irvin Inc.)
3. H.L. Bhatia., Public Finance, Vikas Publishing House Pvt Ltd., New Delhi (recent edition)
4. B P Tyagi., Public Finance, JaiPrakash Nath & Co., Meerut (recent edition)
5. Musgrave and Musgrave (1984), Public Finance in Theory and Practice, McGraw Hill, New Delhi.

SEMESTER - V

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
7	23U5CRECO7	Quantitative Techniques for Economic Analysis - I	4	108

Course outcome:

	Course Outcome	POs/PSO	CL	Class Sessions
CO1	Students will be able to identify, explain, and use economic concepts, theories, models, and data-analytic techniques.	PO1, PSO5	U	30
CO2	Students will develop the necessary skills for preparing questionnaires, collection and classification of data and presentation in charts and graphs.	PO1, PSO5	A	30
CO3	Students will acquire the knowledge of economics, mathematics, statistics, and computing flexibly in a variety of contexts thereby providing the foundation for success in their studies and careers.	PO1, PSO6	A	30
CO4	Students will develop the skills to measure and analyze statistical data in order to draw conclusions about various economic problems.	PO1, PSO6	A	18
Total hours of instruction				**108**

Note: R-remember U-Understand, A- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I: Role of Statistics in Economics

Statistics - Meaning– Functions performed –limitations. Statistical data: Primary and Secondary – their sources: Census and sampling techniques–Sample designs – preparation of questionnaires and schedules –classification and Tabulation of statistical data – Presentation of data with the help of graphs and diagrams (Histogram, Polygon, frequency curve, Bar diagram, Pie diagram, Ogives) **(30 Hrs)**

Module II: Measures of Central Tendency and Dispersion

Various central tendency measures- Arithmetic mean – properties – merits and demerits. Median –definition– merits and demerits –graphic Method – Mode – merits and demerits – methods of calculation: Dispersion- significance of dispersion, methods, absolute and relative measures – Range, quartile deviation, mean deviation, standard deviation – Lorenz curve and its economic applications.

Skewness, Kurtosis, Moments: Types of Skewness–measurement - Kurtosis– Definition and types (graphic presentation) Moments: central and raw moments (for ungrouped data only). **(30Hrs.)**

Module III: Correlation and Regression Analysis

Correlation and regression analysis: their significance in Economics –Correlation and regression compared – types of correlation – measurement, scatter diagram, Karl Pearson's correlation coefficient (for raw data only). Rank correlation –Regression- meaning and significance-regression equations/regression lines-the line of best fit – prediction based on regression equations. Relation between correlation and regression. **(25Hrs.)**

Module IV: Time Series Analysis and Index Numbers

Time series analysis: uses, components, measurement of trend- free hand method, semi average method, Moving average method, Method of least squares.

Index numbers – Different types – Importance and limitations, Problems in construction – Weighted and Unweighted price index numbers –Different methods of construction (Price indices only) – Simple aggregative, simple average of price relatives, Laspeyre's, Paache's, Fisher's and Marshall Edgeworth's indices, Cost of living index numbers: significance and construction (Family budget method only). **(23 Hrs.)**

Reference

1. Sharma J.K. Business statistics. Pearson Education. Noida, India

2. Richard Levin et.al. Statistics for management. Pearson Education. India.

3. Srivastava U.K et.al. Quantitative techniques for managerial decisions. New Delhi: New Age International Publishers. India.

4. Chiang A.C. (2005), Fundamental Methods of Mathematical Economics, McGraw Hill.

5. Gupta S.P., Statistical Methods, Sultan Chand & Sons, New Delhi.

6. Shaum's Outline Introduction to Mathematical Economics, III Edition.

7. Allen R.G.D., Mathematical Analysis for Economists, palgrave macmillan.

8. Monga G.S., Mathematics and Statistics for Economists, Vikas Publishing House, NewDelhi.

SEMESTER- V

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
8	19U5CRECO8	**Macroeconomics - II**	5	108

Course Outcome

	COURSE OUTCOMES	PO/ PSO	CL
CO 1	Evaluates the macro theories of consumption and investment	PO1, PO2, PSO3	E
CO 2	Analyze the theories of money and inflation	PO1, PO5, PSO3	An
CO 3	Analyze trade cycle theories and policy alternatives	PO1, PSO1, PSO2	An
CO 4	Evaluates post Keynesian developments in macro economics	PO1, PO2, PSO1, PSO4	E

Note: R-remember U-Understand, Ap- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I- Theories of Consumption and Investment

Consumption Function - Kuznets's consumption puzzle - conflict between short-run and long run consumption functions - Relative income hypothesis – Permanent income hypothesis - Life-cycle hypothesis. Theory of capital and theory of investment- Present Value Criterion-Accelerator theory of Investment - Tobin's q theory.   (25 hrs.)

Module II- Money, Inflation and Unemployment

Money - classical approach – Keynesian liquidity preference theory and interest rate determination - liquidity trap - Keynes effect - supply of money - sources - high-powered money - money multiplier - measures of money supply in India. Inflation: types – Demand-pull and cost-push inflation – inflationary and deflationary gap-causes and effects of inflation – stagflation - control of inflation - Meaning and types of unemployment - Okun's law - inflation and unemployment - the Phillips curve – long run Phillips curve – Natural rate of unemployment.   (38hrs.)

Module III- Trade Cycles, Monetary and Fiscal Policies

Trade cycles - Types and phases – Theories of trade cycles: Hawtrey, Hayek, Keynes - Stabilization policies - Active or passive. Monetary and fiscal policy: objectives and instruments (concepts only) – Monetary and fiscal policy in the IS-LM context (closed economy only)   (20Hrs)

Module IV- Post Keynesian Schools of Macroeconomic Thoughts

Monetarism- Monetarist propositions and the Quantity Theory Restatement – New Classical Economics - Rational Expectations (concept) - Lucas' critique (policy ineffectiveness proposition) - Supply side economics - Tax cut policy and the Laffer Curve Analysis.   (25Hrs)

Readings

1. B Snowdon & Howard Vane. A Modern Guide to Macro Economics. Edward Elgar

2. R T Froyen. (Recent Edition) Macroeconomics – Theories and Policies. Pearson Education

3. N Gregory Mankiw. Macroeconomics. New York; Worth Publications

4. R Dornbusch, S Fisher. Macroeconomics. Tata McGraw Hill

5. Arthur O' Sullivan et al. (2015). Macroeconomics principles, applications and Tools. New Delhi: Pearson Education South Asia.

6. Macro Economics Simplified - "An introduction to Keynesian and Classical macroeconomic systems" by Nicoli Natrass and G. Visakh Verma, Published by Sage, NewDelhi.2014

7. C Ram Manohar Reddy (2017) Demonetization and Black Money, Orient Black Swann.

8. G Omkarnath (2012) Economics – A primer for India, Orient Black Swann.

SEMESTER - V

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
9	23U5CRECO9	**Environmental Economics**	4	90

Course Outcome

	Course Outcome	POs/PSO	CL
CO1	Understands the nature and scope of environmental economics and the need for preserving natural resources and the ecosystem	PO4, PO6, PSO4	U
CO2	Analyze the importance and threats to biodiversity, and get convinced of the measures to check environmental pollution	PO4, PO6, PSO4	A
CO3	Understand the environment-economy linkage and evaluates the need for sustainability and global efforts to bring balance between economy and environment	PO4, PO6, PSO4	E
CO4	Gain knowledge on human rights and able to link human rights with environmental rights	PO4, PO6, PSO4	A

Note: R-remember U-Understand, A- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I

Unit 1: Multidisciplinary nature of environmental studies

Definition, scope and importance (2 hrs.) Need for public awareness.

Unit 2: Natural Resources:

Renewable and non-renewable resources: Natural resources and associated problems.

  a. Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people.
  b. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
  c. Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.

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d. Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies.

e. Energy resources: Growing energy needs, renewable and non- renewable energy sources, use of alternate energy sources, Case studies.

f. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification

Role of individual in conservation of natural resources - Equitable use of resources for sustainable lifestyles.   (10hrs)

Unit 3: Ecosystems

Concept of an ecosystem - Structure and function of an ecosystem - Producers, consumers and decomposers - Energy flow in the ecosystem - Ecological succession - Food chains, food webs and ecological pyramids.

Introduction, types, characteristic features, structure and function of the given ecosystem: a) Forest ecosystem   (6 hrs.)

Module -II

Unit 1: Biodiversity and its conservation

Introduction - Bio-geographical classification of India - Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values. India as a mega-diversity nation - Hot-spots of biodiversity - Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts - Endangered and endemic species of India   (8hrs)

Unit 2: Environmental Pollution

Definition - Causes, effects and control measures of: Air pollution - Water pollution - Soil pollution - Marine pollution - Noise pollution - Thermal pollution - Nuclear hazards.

Solid waste Management: Causes, effects and control measures of urban and industrial wastes.

Role of an individual in prevention of pollution - Socially optimum level of pollution - Pollution case studies.

Disaster management: floods, earthquake, cyclone and landslides.   (8 hrs.)

Unit 3: Social Issues and the Environment

- Urban problems related to energy

- Water conservation, rain water harvesting, water shed management

- Resettlement and rehabilitation of people: its problems & concerns, Case studies

- Environmental ethics: Issues and possible solutions

- Climate change, global warming, acid rain, ozone layer depletion - Case studies.

- Consumerism and wastage of products

- Environment Protection Act

- Air (Prevention and Control of Pollution) Act

- Water (Prevention and control of Pollution) Act

- Wildlife Protection Act

- Forest Conservation Act

- Issues involved in enforcement of environmental legislation

- Public awareness   (10hrs.)

Module – III Unit I: Economics and Environment

Environmental Economics – Definition – Scope – Meaning – importance – Environment - economy interaction (linkages) – material balance model – relation between environment and development – Environment as a necessity and luxury. Population growth and Environment – market failure – tragedy of commons - sustainable development - policy approach to sustainable development (overview only).

Environmental issues and global concerns: Stockholm Conference – Helsinki Convention – Montreal Protocol – Kyoto Protocol – Rio Summit – Paris Convention.
                                                                        (16 hrs.)

Module IV Unit 1: Framework and Criteria for Environmental Analysis

Evaluation of environmental benefits – Contingent Valuation Method – Hedonic approach – travel cost method – preventive expenditure method - surrogate market approach – property value approach and wage differential approach - cost benefit analysis – UNIDO analysis – Little-Mirrlees approach - Environmental Impact Analysis.   (18hrs)

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Module – V

Unit 1- Human Rights– An Introduction to Human Rights, Meaning, concept and development, Three Generations of Human Rights (Civil and Political Rights; Economic, Social and Cultural Rights).

Unit 2 - Human Rights and United Nations–contributions, main human rights related organs - UNESCO, UNICEF, WHO, ILO, Declarations for women and children, Universal Declaration of Human Rights. Human Rights in India – Fundamental rights and Indian Constitution, Rights for children and women, Scheduled Castes, Scheduled Tribes, Other Backward Castes and Minorities.

Unit 3 - Human Rights and environmental rights - Right to Clean Environment and Public Safety: Issues of Industrial Pollution, Prevention, Rehabilitation and Safety Aspect of New Technologies such as Chemical and Nuclear Technologies, Issues of Waste Disposal, Protection of Environment.

Conservation of natural resources and human rights: Reports, Case studies and policy formulation. Conservation issues of western Ghats - mention Gadgil committee report, Kasthurirangan report.

Over exploitation of ground water resources, marine Fisheries, sand mining etc.

(12Hrs.)

Reference

1. Agarwal, K. C 2001 Environmental Biology, Nidi Publ. Ltd,Bikaner.

2. Bharucha Erach, Text Book of Environmental Studies for undergraduate Courses. University Press, IInd Edition 2013 (TB)

3. Brunner. R. C., 1989, Hazardous Waste Incineration, McGraw Hill Inc.480p

4. Clark. R. S., Marine Pollution, Clanderson Press Oxford (TB)

5. Heywood, V.H & Watson, R.T. 1995. Global Biodiversity Assessment, Cambridge University Press.

6. Jadhav. H & Bhosale. V. M.1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi.

7. Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut

8. Townsend   C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science (TB)XI

9. Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Standards, Vol I and II, Enviro Media (R)

10. Rabindra N Bhattacharya. (2007). Environmental Economics an Indian Perspective. Oxford University Press.

11. Charls D. Kolstad. (2007). Environmental Economics. New Delhi: OUP.

12. Janet Thomas. (2009). Environmental Economics. New Delhi: Centage Learning.

13. S. P. Mirsa, Pandey (2008), Essential Environmental Studies. New Delhi: AneBooks.

14. Katar Singh and Shishodia. (2007) Environmental Economics- Theory and application. New Delhi: Sagepublication.

15. Ulaganathan Sankar. (2009) Environmental Economics. New Delhi: OUP.

16. N. Das Guptha (1997). Environmental Accounting. Wheeler and Co New Delhi.

17. Thomas and Callan (2007). Environmental Economics. Thomas South-Western.

18. Paul Ackin.(2000), Economic Growth and Environmental sustainability, Routledge, London.

19. Nick Hanley. (2009) Environmental Economics in Theory and Practice. Palgrave McMillian, New York.

20. Fisher A. C. (1981). Resource and Environmental Economics. Cambridge University Press, Cambridge.

21. Baumol. (1988). Theory of Environmental Policy (second edition). Cambridge University Press, Cambridge

22. Prasanna Chandra: Projects- Planning, Analysis, Financing, Implementation & Review. (5thedition) Tata McGraw Hill.

23. P R Trivedi. (2014) Environmental Impact Assessment. APH Publishing Corporation.

SEMESTER V

Core Course No.	Course Code	Course Title	No. of Credit	No. of Contact Hours
10	23U5CRECO10	Modern Banking	4	90

Course Outcome

	COURSE OUTCOME	POs/PSOs	CL
CO1	Understands different systems of banking and the historical context of their development	PO1, PSO1	U
CO2	Analyses the structure and functioning of Indian banking system	PO1, PSO1	An
CO3	Develops understanding and ability to use IT based banking services	PO1, PSO1	A
CO4	Develops understanding and ability to use IT based banking services	PO6, PSO1	A
CO5	Develops basic knowledge about practical and legal aspects of banker-customer relationship	PO1, PSO2	E

Note: R-remember U-Understand, A- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I - Banking: Structure and Theories

Evolution of Banking - Italy and England - Brief history of commercial banking in India – Structure of commercial banks – Functions – Credit creation – Branch banking – Unit banking – Mixed banking – Chain banking – Central Bank – meaning – Central Banking in USA and India. Functions of Central Bank with reference to RBI - Theories of Banking, Real Bills Doctrine – Shiftability theory – Anticipated Income theory – liquidity, safety and profitability. (30 hrs.)

Module II – Rural Banking

Rural banking – Co-operative banks – Primary Agricultural credit societies – Central Co-operative banks – State co-operative banks – Regional Rural Banks (RRBs) – NABARD – Functions of NABARD. (10 hrs.)

Module III – Banking Sector Reforms and Emerging Trends

Banking sector reforms – Narasimham Committee Reports – New generation banks and emerging trends in banking–e-banking, ATM, Debit and Credit cards – Internet banking – Core banking – Mobile banking, RTGS, NEFT, SWIFT, MICR cheques / drafts. Cheque Truncation (concept only). ECS – smart card – risks in e-banking, Digital Payment System in India – Digital currency – Prepaid Payments instruments – Small Finance Bank – Payment Bank – NPAs.   (20 hrs.)

Module IV – Practical Banking

Practical Banking – Banker-customer relationship – General and special relations – Garnishee order – Know Your Customer (KYC) Negotiable instruments – Credit instruments – Cheques, drafts, promissory notes, bills of exchange. (15 hrs.)

Readings

1. Jyotsna sethi and Niswan Bhatia (2008), Elements of Banking and Insurance, Prentice Hall India

2. Hajela,T.N.,(2009)Money and Banking, Anne Books Pvt. Ltd., New Delhi.

3. Sundharam KPM, Banking: Theory, Law and Practice, Sultan Chand and Sons, New Delhi (recent edition)

4. M.R. Baye, D.W. Jansen (1996), Money, Banking and Financial Markets, AITBS (Indian ed.)

5. K.C. Sekhar: Banking – Theory and Practice, Vikas Publishing House, New Delhi (recent edition).

SEMESTER - VI

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
11	23U6CRECO11	Quantitative Techniques for Economic Analysis - II	4	108

Course Outcomes

	Course Outcome	POs/PSO	CL	Class Sessions
CO1	Students will be able to identify, explain, and use economic concepts, theories, models, and data-analytic techniques.	PO1, PSO5	U	30
CO2	Students will develop the necessary mathematical and statistical skills for economic analysis.	PO1, PSO5	A	30
CO3	Students will acquire the knowledge of economics, mathematics, statistics, and computing flexibly in a variety of contexts.	PO1, PSO6	A	30
CO4	Students will develop the skills to measure and analyse statistical data and to draw conclusions.	PO1, PSO6	A	18
Total hours of instruction				**108**

Note: R-remember U-Understand, A- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I: Mathematics for Economic Analysis

Basic concepts: variables, constants, parameters, equations, sequences, progression: Arithmetic progression and Geometric progression, Calculation of simple interest and compound interest,

The real number system. Types of numbers – properties of real numbers – set theory – Types – Set operations – Venn diagrams – Functions: Important economic functions –Ordered pairs and Cartesian products. (25 hrs.)

Module II: Introduction to matrices

Introduction to matrices – Definition and types of matrices, Order of matrix, Transpose of matrix Matrix Algebra – addition, subtraction and multiplication, Determinants, Minors and cofactors, Inverse of a matrix, Cramer's Rule. (10 hrs.)

Module III: Differential Calculus

Differential Calculus: Its significance in Economics. Rules of differentiation – First order and second order derivatives – practical applications – Maxima and Minima of functions. Integration- Basics. (15 hrs.)

Module IV: Probability and Distribution

Probability and Distribution: Concept – Rules of probability (addition and multiplication theorem – statement only) – Different approaches – Important terms related to probability (Random experiments, sample space, events) – Simple problems based on theorems – Probability distribution – binomial and normal distribution–their properties and uses – Estimation of probabilities using standard normal table. (33 hrs.)

Module V: Statistical Inference – Test of hypothesis

Testing of hypothesis – testing, simple and composite hypothesis - null and alternative hypothesis –Type I and Type II errors, significance level and power, concept of P value in testing, test procedure. Z and t tests-(Testing the mean of a population - large and small sample, Testing the difference between two means of independent and paired samples, testing the proportion of a population) F- test (testing the equality of variances of two populations) chi square (testing the independence of two attributes and goodness of fit). (25 hrs.)

References

1. Chiang A.C. (2005), Fundamental Methods of Mathematical Economics, McGraw Hill.

2. Gupta S.P., Statistical Methods, Sultan Chand & Sons, New Delhi.

3. Allen R.G.D., Mathematical Analysis for Economists, Palgrave mac Millan.

4. Monga G.S., Mathematics and Statistics for Economists, Vikas Publishing House,

SEMESTER- VI

Core Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
12	23U1CRECO12	**International Economics**	4	90

Course Outcome

		COURSE OUTCOMES	PO/ PSO	CL
CO 1		Explains the basic concepts and tools of international economics and basis of international trade	PO1, PO2, PO6, PSO3	U
CO 2		Examines the structure and working of foreign exchange markets and balance of payments	PO1, PO6, PSO1, PSO3	An
CO 3		Evaluates the role and importance of commercial policy	PO1, PSO1, PSO2	E
CO 4		Analyze the structure and working of international monetary system	PO1, PO6, PSO1, PSO3	An

Note: R-remember U-Understand, A- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I - Introduction to the Theory of International Trade

International Economics – Meaning and Significance – Pure theory of international trade – Basic concepts – terms of trade – meaning and types - offer curve – community indifference curve –opportunity cost – Absolute advantage – Comparative advantage- Reciprocal Demand – the Heckscher– Ohlin theory – Factor price equalization theorem- Leontief Paradox – gains from trade – static and dynamic gains.   (20hrs.)

Module II - Balance of Payments

Meaning and structure of balance of payments – equilibrium and disequilibrium in the balance of payments – measures to correct disequilibrium – Devaluation and Balance of Payments –effects of currency depreciation and capital movements on BOPs

Marshall Lerner condition – J-curve effect.   (20 hrs.)

Module III - Foreign Exchange Rate

Equilibrium Rate of Exchange – theories of exchange rate determination – purchasing power parity theory – BOP theory – Fixed and flexible exchange rate- forward rate – spot rate – nominal, real, and effective rate of exchange – Foreign exchange risks – hedging and speculation –currency derivatives –future options – currency swaps- international liquidity   (25 hrs.)

Module IV - Trade Policy and Financial Systems

Commercial policy – free trade vs protection – Tariffs and Quotas - their effects – Gold standard& Mint parity- Bretton Woods System - IMF – IBRD; WTO - Economic integration- Types -BRICS.   (25 hrs.)

Books/Journals for Reference

1. Sodersten, Bo. And Geoffry Reed, International Economics, Palgrave macmillan

2. Dominic Salvatore, (recent edition) International Economics. John Wiley and Sons,Delhi.

3. Francis Cherunilam (2008), International Economics, Tata McGraw Hill, Delhi.

4. Giancarlo Gandolfo (2006) Elements of International Economics, Springer (India) Private Limited.

5. Dominic Salvatore, Schaum's Outlines, Theory and Problems of International Economics. Tata McGraw Hill, New Delhi.

SEMESTER - VI

Open Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
13	23U6CRECO13	Introductory Econometrics	4	90

Course Outcome

		COURSE OUTCOMES	PO/ PSO	CL
CO 1		Understand the meaning and methodology of econometrics.	PO4, PO1, PSO5, PSO2	U
CO 2		Analyze the application of Population Regression Function and Sample Regression Function in econometrics	PO4, PO1, PSO1	An
CO 3		Understands the concept of Ordinary Least Square estimators and its various assumptions	PO4, PO1, PSO2, PSO1	U
CO 4		Develops the skills to build predictive models that help in decision making.	PO1, PO4, PSO1, PSO4, PSO5	Cr
CO 5		Equip students to get a knowledge regarding how to do a social science research using empirical data with the help of econometric tools.	PO1, PO2, PO3, PO5, PSO3, PSO5	Cr

Note: R-remember U-Understand, A- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I: Introduction to Econometrics

Definition and Scope of Econometrics, Methodology of Econometrics, Population regression function (PRF) — The concept of linearity in econometrics—stochastic interpretation and its significance — Sample regression function (SRF). (20 Hours)

Module II: Simple Linear Regression Model

Estimation of PRF — The method of OLS—Advantages of OLS—Numerical Properties of OLS estimators— Statistical properties of OLS— Gauss - Markov Theorem and the assumptions of Classical Linear Regression Model Evaluation of SRF—Goodness of the

Fit—R Square—Adjusted R Square – Reliability and Precision of OLS estimators—Standard Error of the OLS Estimator and the Estimate. (30hrs)

Module III: Multiple Regression Model

Introduction to multiple regression model – Three variable model, Assumptions, interpretation of multiple regression equation. Hypothesis testing and estimation—Point and interval estimation (Basics) - Hypothesis testing of OLS estimators — t test, f test (20hrs.)

Module IV: Problems in Regression Analysis

Relaxing the assumption of classical linear regression model- Heteroscedasticity—nature, estimation in its presence—detection and remedial measures—Autocorrelation—nature and estimation in its presence— detection and remedial measures — Multicollinearity—nature, estimation in its presence—detection and remedial measures. (20hrs)

Readings:

1. Gujarati, Porter and Gunasekhar (2007), Basic Econometrics, Fifth Edition, Tata McGraw Hill, New Delhi

2. A Koutsoyiannis, Theory of Econometrics, Second Edition, Palgrave Macmillan

3. Chandan Mukherjee, Howard White and Marc Wytus, Econometrics and Data Analysis for Developing Countries", Routledge.

4. James H stock and Mark W (2007). Watson, Introduction to Econometrics, Pearson Education; 3rd edition.

5. Ramu Ramanathan, Introductory Econometrics with Applications, S. Chand & Company Ltd; 5th Revised edition.

6. Christopher Dougherty, Introduction to Econometrics. New Delhi: Oxford University Press.

7. Johnston. J. Econometric Methods. McGrawHill.

8. GS Maddala and Kajal Lahiri, Introduction to Econometrics, Wiley India, New Delhi

9. Dominick Salvatore, Derrick Reagle, Schaum's Outline of Statistics and Econometrics, Second Edition, McGraw-Hill Education.

SEMESTER - VI

Open Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
14	23U6CRECO14	**Indian Economy**	4	90

Course Outcome

		COURSE OUTCOME	POs/PSOs	CL
CO1		Understands the growth and its strategy adopted by the country since independence.	PO1, PSO2	An
CO2		Examine the contribution of various sectors to the GDP of the country and identify their problems and prospects.	PO1, PSO2	E
CO3		Develop the capacity to analyze the demographical changes of a society and to provide policy resolutions.	PO1, PSO2	An
CO4		Understand and analyse the growth pattern of the state of Kerala and its implications.	PO1, PSO2	An

Module I: Economic Development Strategy since Independence

Trends in India's National Income and per capita income – Magnitude of poverty and inequality in India – unemployment – inflation targeting - parallel economy.

Mixed Economic Framework - Basic strategies, objectives and achievements of planning in India- Inclusive Development - NITI Aayog – Economic Crisis of 1990s – Macro Economic Reforms Implemented Since 1991 - Structural Adjustment Programmes - Performance of Indian economy before and after economic reforms - External sector reforms since 1991 - Trade and currency reforms, - FDI, MNCs. Impact of Covid-19 on Indian economy. (25 hrs)

Module II: Agriculture, Industry, and Service Sector

Role of Agriculture in Indian Economy - New Agricultural Strategy – Green Revolution — Need for Second Green Revolution - Agricultural Growth and Performance – Changes in Land use and Cropping Pattern - Agricultural Finance and Issues – crop Insurance – Food security and PDS in India. Industrial growth during pre-reform and post-reform period - Industrial Policy Resolutions till 1991– Key and Strategic Role of PSUs - Recent industrial policies: Make in India – Start up India, Role of Micro, Small and Medium Enterprises (MSMEs) in Indian economy - problems and remedies- Role and performance of service sector in Indian economy - Microfinance and its significance – Importance of infrastructure in India's economic development.

(30 hrs)

Module III: Demographic Features of India

Demographic trend and pattern of India since independence. Changes in major demographic indicators- Birth and death rates, IMR, MMR, Sex ratio, age composition, literacy – changes in rural-urban population, urbanization, and its problems. Demographic dividend, population policy. Gender inequality, women empowerment, education, health, and malnutrition. (15hrs)

Module IV: Kerala Economy

Kerala model of development – Limits to Kerala model – Structural change and economic growth of Kerala – changes in cropping pattern – agricultural indebtedness – Industrial backwardness – Service sector - Educated unemployment - Fiscal crisis in Kerala, Migration and economic development, Decentralized planning in Kerala, Changes in the health profile of Kerala.

(20hrs)

References:

1. Puri, V. K., & Misra, S. K. *Indian Economy* (Latest edition). Himalaya Publishing House, Mumbai.
2. Dutt, G., & Mahajan, A. *Indian Economy* (Latest edition). S. Chand.

3. Prakash, B. A., & Alwin, J. (2019). *Kerala's Economic Development: Emerging Issues and Challenges* (First ed.). SAGE Publications Pvt. Ltd.

4. Mani, S. (2020). *Kerala and the World Economy*. Centre for Development Studies, Thiruvananthapuram.

5. State Planning Board, *Economic Review*, Government of Kerala, Thiruvananthapuram (various issues)

6. George, K. K., (1999) *Limits to Kerala Model of Development*, Centre for Development Studies, Thiruvananthapuram.

Choice Based Elective Courses

SEMESTER- VI

Choice Based Elective Course	Course Code	Course Title	No. of Credits	No. of Contact hours
01	23U6ELECO1	**Economics of Financial Markets**	3	72

Course Outcome

	COURSE OUTCOME	POs/PSOs	CL	Class Sessions
CO1	Develops better understanding of Indian financial system	PO1, PSO1	U	15
CO2	Become familiar with money market operations in the country.	PO1, PSO1	A	15
CO3	Understand and practice basic capital market operations	PO1, PSO1	A	25
CO4	Attain knowledge about major financial market institutions in India	PO1, PSO1	U	17
Total Hours of Instruction				**72**

Note: R-remember U-Understand, A- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I – Indian Financial System

Structure of Indian Financial System – Functions of financial system in economic development - Monetary and Non-monetary (banking and non-banking) financial intermediaries - Insurance companies – recent trends, pension funds and provident funds, mutual funds, investment banks, asset management companies, venture capital funds. (15 hrs.)

Module 2: Money Market

Money market – Meaning, Features, Functions – Money market instruments: T-bills - Commercial papers - Certificate of deposits – Bankers' acceptance – Participation certificate - Call money, notice money, term money – Gilt-edged securities – REPOs – CBLOs. Sub-markets of money market: Call money market, Collateral loan market, Acceptance market, Bill market, Market for CDs and CPs, Short term loan market.   (15 hrs.)

Module 3: Capital Market

Capital market- Meaning, Functions, Structure - Instruments of Capital market: Equity shares, Preference shares, Deferred shares, Bonds and debentures, ESOPs, Depository receipts, Exchange Traded Funds (ETFs), REITs.

Primary market (New Issue market): Functions of NIM - Methods of public issue: IPO and FPO – Bonus shares, Rights, stock splits – Intermediaries in NIM (merchant bankers, underwriters, registrar and share transfer agents, bankers to an issue, stock brokers).

Secondary Market: Nature and functions - Stock exchanges in India: BSE, NSE, MCX. Online trading – Demat account.

Derivatives Market: Derivatives – meaning, benefits – types of derivative contracts: Forwards, futures, options, warrants and swaps.   (25 hrs.)

Module IV – Major Financial Institutions and Services

Role of RBI in Indian financial market – Functions of Securities and Exchange Board of India – Role of Insurance Regulatory Development Authority – Employees' Provident Fund Organization - Credit rating institutions in India: CRISIL, ICRA and CARE – Functioning of depositories in India: NSDL, CDSL.   (17 hrs.)

Readings

1.   S.B. Gupta (2001). Monetary Economics: Institutions, Theory and Policy, S. Chand & Co, New Delhi, Part I
2.   L.M. Bhole (recent edition). Financial Institutions and Markets, Tata   McGraw Hill, New Delhi

3. V.A. Avadhani, Investment and Securities Market in India, Himalaya Publishing House, Bombay (recent edition)

4. Zuvi Bodie, Robert C Merton et al. (2009), Financial Economics, Pearson Education (Ch.1 (1.1, 1.2), Ch.2 (2.1, 2.5, 2.7) only.

5. M.Y. Khan (recent edition) Indian Financial System, Tata McGraw Hill, New Delhi.

6. Suraj B. Gupta (2012), Monetary Economics, Institutions Theory And Policy, S Chand And Company Limited, New Delhi.

SEMESTER- VI

Choice Based Elective Course	Course Code	Course Title	No. of Credits	No. of Contact hours
02	23U6ELECO2	**Health Economics**	3	72

Course Outcome

	Course Outcome	POs/PSOs	CL	Class Sessions
CO1	Understand the role and importance of Health Economics	PO1, PSO1	U	10
CO2	Students will understand the basic concepts related to the demand for healthcare in an economy.	PO1/PSO1	U	20
CO3	Students will acquire the ability to evaluate the healthcare system in an economy.	PO1/PSO1	E	25
CO4	Students will be able to gather and analyse various information on healthcare in an economy.	PO1/PSO1	An	17
Total hours of instruction				**72**

Note: R-remember U-Understand, Ap- Applies An-Analyses, E-Evaluates, Cr- Creates

MODULE I: INTRODUCTION TO HEALTH ECONOMICS.

Relevance of Health Economics-Features of economic analysis in health care-How healthcare is different-Presence and extent of uncertainty, insurance, information-Role of equity and need.

Birth rate - Death rate - Infant mortality rate - Maternal mortality rate - Morbidity - Quality of adjusted life year (QALY)   (20 hrs.)

MODULE II: DEMAND FOR HEALTH CARE

Utility, indifference curves and demand curves for health care - demand curve for the society – adding up of the individual demands – insurance and demand – role of quality in the demand for care – time costs and travel costs.

Production function of health, role of medicine – role of education – cost minimization and output maximization.   (20 hrs.)

MODULE III: ECONOMIC EVALUATION OF HEALTH CARE SYSTEM.

Meaning of economic evaluation – importance of economic evaluation – types of economic evaluations - cost of illness studies – cost- benefit analysis – cost effectiveness analysis. (17 hrs.)

MODULE IV: INFORMATION IN HEALTH CARE

Asymmetric information – application of the principle of lemons – principal agent relationship – adverse selection – supplier induced demand – consumer information and quality – moral hazard – existence of monophony and monopoly rent in health care – price discrimination.
                                                        (15 hrs.)

References

Wonderling, David, Reinhold Gruen and Nick Black (2007): Introduction to Health Economics, Berkshire, Open University Press.

Rushby, Julia Fox- and John Cairns (Ed) (2006): Economic Evaluation. Delhi, Tata McGrawHill.

Sherman, Folland, Allen C Goodman and Miron Stano (2012): The Economics of Health

and Health Care, Pearson Prentice Hall.

Neun, Santerre (1996): Health Economics Theories, Insight and Industry Studies, Health

Economics' (3rd ed), (Published by Irwin 1996. Charles E Phelps, Addison Wesley).

Phelps, Charles E (2002): health economics, Addison Wesley

Sherman Folland, Allen C Goodman and Miron Stano (2012): The Economics of Health

and Health Care, Pearson Prentice Hall.

Henderson, J. W (2010): Health Economics & Policy, Thomson South Western (3rd ed.)

Sherman Folland, Allen C Goodman and Miron Stano (2012): The Economics of Health

and Health Care, Pearson Prentice Hall.

SEMESTER- VI

Choice Based Elective Course	Course Code	Course Title	No. of Credits	No. of Contact hours
03	19U6ELECO3	**Mathematical Economics**	3	72

Course Outcome

	Course Outcome	**POs/PSOs**	**CL**	**Class Sessions**
CO1	Understand the role of Mathematics in economic analysis	PO1, PSO1	U	10
CO2	Students will understand the basic concepts like integration, differentiation, functions etc for economic applications	PO1/PSO1	Ap	20
CO3	Students will acquire the knowledge about multivariable functions, implicit and inverse function rules and its economic applications	PO1/PSO1	An	25
CO4	Students will acquire knowledge about integral calculus and its properties	PO1/PSO1	U	17
Total hours of instruction				**72**

Note: R-remember U-Understand, Ap- Applies An-Analyses, E-Evaluates, Cr- Creates

Module I: Functions of one real variable

Types of functions- constant- polynomial- rational-exponential-logarithmic-Graphs and graphs of functions-Limit and continuity of functions-slope of

curvilinear function. The Derivatives—rules of differentiation- higher –order derivatives- implicit differentiation- Economic applications.　　　　(25 hrs.)

Module II: Calculus of multivariable functions

Functions of several variable- partial derivatives- rules of partial derivatives- second order partial derivatives. Optimization of multivariate functions- constrained optimization with Lagrange multiplier. Differentials-total and partial differentials-total derivatives-implicit and inverse function rules-Economic applications.

(25 hrs.)

Module III: Integral Calculus

The indefinite integral-integration-rule of integration-integration by substitution and by part. The definite integral- properties of definite integrals- area under a curve- area between curves- Economic application- consumer and producer surplus.

(22 hrs.)

Readings

Dowling, Edward T (2008): Introduction to Mathematical Economics, 3rd Ed, Schaum's Outline Series, McGraw Hill. (Chapters 3-6, 16-17)

Knut Sydsaeter, Peter Hammond and Arne Strom (2012): Essential Mathematics for Economic Analysis 4th Edition, Pearson India (Chapters: 4- 9)

Mik Wisneiwski (1998): Introductory Mathematical Methods in Economics, 2nd Ed McGraw- Hill, (Chapters -7-10 and 13).

Geoff Renshaw (2009): Maths for Economics, 2nd Ed, OUP (Ch-6-9, 14-16 and18).

K. Holden and A W Pearson (2010): Introductory Mathematics for Economics and Business, 2nd Ed. Macmillan (Ch-5-7).

Ian Jacques (2015): Mathematics for Economics and Business, 5th Ed, PH. (Ch-4-6).

Akihito Asano (2013): An Introduction to Mathematics for Economics, CUP, (Ch-4-7)

SEMESTER- VI

Choice Based Elective Course	Course Code	Course Title	No. of Credits	No. of Contact hours
04	23U6ELECO4	**Behavioral Economics**	3	72

Course Outcome

	COURSE OUTCOME	POs/PSOs	CL	KC	CLASS SESSIONS
CO1	Able to identify and evaluate evidence for systematic departures of economic behavior from the predictions of the neoclassical model, and psychological explanations for these anomalies.	PO1/PSO1	An	C	20
CO2	Incorporate psychologically motivated assumptions into economic models, and interpret the implications of these assumptions.	PO1/PSO1	E	C	20
CO3	Explain how these models change the predictions for equilibrium behavior and welfare analysis, and assess the implications for optimal policy.	PO1/PSO2	E	C	16
CO4	Compare the predictions of neoclassical and behavioral models, and evaluate the best method for approaching a given topic.	PO2/PSO1	Ap	C	16
	TOTAL HOURS OF INSTRUCTION				72

Module- I

Introduction to Behavioral Economics Origins of Behavioral Economics, Decision-making under Neo-classical economic framework- rationality, optimization Role of Intuition, Emotions, Beliefs in decision making Bounded Rationality Judgment under Risk & Uncertainty: Heuristics & Biases Heuristics: Representativeness, Substitution,

Availability, Affect, Anchoring, framing Biases: Cognitive and emotional biases.

(20 hrs.)

Module-II

Choice Under Risk & Uncertainty Expected Utility Prospect Theory – Reference Points – Risk Concept and Understanding – Loss Aversion – Shape of Utility Function – Decision Weighting – Probabilistic Judgment. Mental Accounting Framing Mental Accounts Fungibility & Labels Hedonic Editing. (20 hrs.)

Module III

Intertemporal Choice, Temporal Choice, Construal Level Theory, Valuation of Delayed Consumption Preferences for Sequences of Outcomes, Hyberbolic Discounting, Preference Reversal. (16 hrs.)

Module IV

Behavioral Game Theory Social preferences: Fairness, trust, cooperation, reciprocity, Norms Limited Strategic Thinking Choice architecture: Nudge, Nudge vs. boost, Behavioral public policy. (16 hrs.)

Reference
1. Erik Angner, Course in Behavioral Economics, Palgrave Macmillan.

2. M. Altman, Handbook of Contemporary Behavioural Economics: Foundation and Developments (2007), Prentice Hall India.

3. Cartwright, Behavioural Economics (2011), Routledge.

4. D. Kahneman, Thinking Fast and Slow (2011), Allen Lane, Penguin Books.

5. World Development Report 2015: Mind, Society, and Behavior.

4. Open Course
Economics in Everyday life

This course is designed for students of other disciplines to familiarize themselves with economic concepts, principles, and practices that they have to engage in the usual course of life.

SEMESTER-V

Open Course No.	Course Code	Course Title	No. of Credits	No. of Contact hours
01	23U5OCECO1	**Economics in Everyday Life**	3	72

Course Outcome

		COURSE OUTCOME	POs/PSOs	CL	Class Sessions
CO1		Understands basic concepts and tools used in the discipline of economics	PO1, PSO1	U	12
CO2		Understand the revenue expenditure and budgetary activities of the government	PO3, PSO1, PSO4	U	4
CO3		Understands the role of government and monetary authority in stabilizing the market economy	PO1, PSO2,	U	7
CO4		Understand the banking products, procedures, and means of fund transfer in modern times	PO1, PSO1	U	8
Total Hours of Instruction					**72**

Note: R-remember U-Understand, A- Applies An-Analyses, E-Evaluates, Cr- Creates

Module 1: Basic Concepts

Economics – micro and macroeconomics – deductive and inductive reasoning – basic economic problems – production possibility curve. Utility - total and marginal. Law of Demand – elasticity of demand – the concept of elasticity –price- income and cross elasticity- Law of supply. National income – meaning - components of national income.

(12hrs.)

Module 2: Public Economics

State vs Market - public revenue - public expenditure – tax and non-tax revenue - direct and indirect taxes – goods and service tax in India - budget – types – fiscal deficit - revenue deficit - public debt – trade cycle and its phases - fiscal and monetary policies as tools for combating inflation and deflation.   (12 hrs.)

Module 3: Banking and Financial System

Commercial banks and their functions- Core Banking, Internet Banking, Mobile Banking, ATM/Debit & Credit Cards, IFSC, NEFT, RTGS–NPA in the Indian banking sector Negotiable and non-negotiable instruments – cheques – drafts – bills of exchange –promissory notes-letter of credit - certificate of deposits – commercial papers - RBI– functions - money and capital market– major financial instruments – shares, debentures, and bonds – stock exchange– BSE, NSE – stock market indices– SEBI-mutual funds.   (24 hrs.)

Module4 International Trade, Economic Planning, and Federal Finance

Gains from trade-Terms of trade - the balance of trade - the balance of payments - foreign exchange - the exchange rate – spot – forward – fixed – floating - IMF, World Bank – WTO. Planning in India - Objectives- planning commission and NITI Aayog - change in the sectoral contribution of GDP in India - Finance commission and its functions- federal finance- the division of powers and devolution of resources.

(24 hrs.)

References:

1. Samuelson & Nordhaus: Economics (Indian adaptation) 19e Mc Graw Hill 2010.

2. Dominic Salvatore: Micro economic Theory Shaum outline Series Indian Edition2017

3. Sundharam V: Money Banking & Public Finance Alfa Publications2009

4. Giancarlo Gandolfo (2006) Elements of International Economics, Springer (India) Private Limited.

5. PROJECT (23U6PJECO1)

All students must do a project. It can be done individually or as a group. However, the viva voce examination on this project will be conducted individually. The projects are to be identified during the V semester of the programme with the help of the supervising teacher. The report of the project is to be submitted to the department for valuation by the examiners appointed by the College.

A project is a scientific and systematic study of real issue or a problem intended to resolve the issue with application of concepts, principles, theories and processes. It should entail scientific collection, analysis and interpretation of data to valid conclusions.

TOPIC SELECTION:

The first step of the project work is to choose a suitable topic for study. This choice will be entirely personal from the area of interest or career prospects of students. The study can deal with any issue of social and economic relevance in an area, organization, related issues of contemporary relevance or a case-study to investigate an describe a phenomenon within its real life context.

PROJECT WORK AND EXPERIENTIAL LEARNING:

Project Work is the best way to practice what you have learnt. It provides an opportunity to investigate a problem by applying concepts in a scientific manner. It enables the application of conceptual knowledge in a practical situation and to learn the art of conducting a study in a systematic way and presenting its findings in a coherent report. The project work helps the students to address and resolve a range of issues an economy faces and become part of valuable learning experience.

PROJECT GUIDELINES:

1. Project work may be done individually or as a team of students not exceeding 5 in number.

2. Team should be, to the extent possible, diverse in composition with different capabilities (weak, strong, creative, analytical etc.) and different orientation (liberal, conservative etc.) to enable cross learning.

3. Divide the project up into a series of smaller steps or parts. Put the parts of the project into a time sequence (literature survey, acquiring a sampling frame, data, analysis etc.)

4. The project topic should be on economic issues / theoretical / case study type bearing on the economic aspects of social life

5. Project topic should be identified in the V semester and the project work should be completed by the end of the VI semester.

6. Project work should be done under the supervision and guidance of teachers.

7. A copy of the project report in English (printed or typed) should be submitted by the student/team on or before 31March of the year concerned.

8. The valuation of the project will be done at two stages:

   a. Internal evaluation (supervising teachers will assess the project and award grades)

   b. External evaluation (The team will comprise of an external examiner appointed by the College and the HoD of the institution concerned or his nominee)

   c. A Viva voce related to the project work will also be conducted by the external evaluation team. All candidates should undergo the Viva voce test individually.

   d. Grades will be awarded to candidates combining the internal grade, team grade and Viva voce grade.

9. Length of the project report - 20 to 35 pages. The report may be organized in 3 chapters(minimum).The use of simple statistical tools in data analysis may be encouraged.

10. Project evaluation and the Viva voce should be conducted immediately after the completion of the regular classes /written examination.

11. The chairman of the VI semester exam should form and coordinate the evaluation teams and their work.

12. The project external evaluation should be completed before the commencement of the centralized valuation.

13. External Examiners will be appointed by the Chairperson of Board from the list of VI semester Board of Examiners.

PROJECT EVALUATION

Internal Marks	
Components	
Topic and area selected	2
Experimentations/ Data Selected	5
Punctuality –Regularity	3
Compilation	5
Content	5
Presentation	5
Total	**25**

A MODEL PROJECT DESIGN

The project work can be designed by considering the following elements.

1. Selection of a Topic
2. Pilot Survey–a trial run of questionnaire/interviews
3. Significance / Social relevance of the Study
4. Review of Literature
5. Formulation of Research Questions /Issues
6. Research Objectives (Minimum 2)
7. Coverage (Universe / Sample & period of study)
8. Data source (Primary/Secondary)
9. Methods of Analysis i.e., Tools and Techniques
10. Limitations of the study
11. Chapter outline
12. Result Chapter(s)
13. Conclusion

STRUCTURE OF THE REPORT

The report should be organized in the following sequence:

i) Title page

ii) Name of the candidate, Name and designation of the supervising teacher

iii)   Declaration of the student and certificate of the supervising teacher

iv)   Acknowledgements

v)   List of tables, List of figures, table of contents

vi)   Introduction

vii) Significance of the study

viii) Related works, if any

ix)   Objectives, methodology and data sources

x)   Chapter scheme

xi)   Main text, summary conclusions and recommendations

xii) Bibliography

6. PATTERN OF QUESTIONS

Questions shall be set to assess knowledge acquired, standard application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and the ability to synthesize knowledge. The question setter shall ensure that questions covering all skills are set. He / She shall also submit a detailed scheme of evaluation along with the question paper.

A question paper shall be a judicious mix of objective type, short answer type, short essay type /problem solving type and long essay type questions.

Pattern of questions for external examination for theory paper without practical.

	Total no. of questions	Number of questions to be answered	Marks of each question	Total marks
	10	10	1	10
	10	8	2	16
	7	5	5	25
	4	2	12	24
TOTAL	**31**	**25**	-	**75**

7. MODEL QUESTION PAPERS

B. A. DEGREE END SEMESTER EXAMINATION
SEMESTER 2: ECONOMICS
COURSE: MICROECONOMICS I

Time: Three Hours   Max. Marks: 75

PART A
Answer All (1 mark each)

1. Microeconomics

2. Partial Equilibrium

3. Positive Economics

4. Marginal Product

5. Isocost line

6. Demand Function

7. Supply Curve

8. Stock Variable

9. Giffen goods

10. Production possibility Curve.   (1 x 10 = 10)

PART B
Answer any 8 (2 marks each)

11. Enumerate the properties of indifference curves.

12. Explain PPC.

13. Engel Curve.

14. Explain Comparative Statics.

15. Increase and Decrease in demand

16. Explain the degrees of Elasticity of Supply.

17. Distinguish between Cardinal and Ordinal Utility.

18. If D=30-2P and S=10+3P, what is the equilibrium price P?

19. Internal Economies of Scale.

20. Explain the features of capitalism.   (2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. Write an account on the determinants of Demand.

22. Explain Water Diamond Paradox.

23. Distinguish between weak and strong axioms of Revealed Preference Hypothesis?

24. What are the Basic Economic Problems?

25. Explain cross elasticity of demand for substitutes and complementary goods.

26. Explain Cobb–Douglas production function.

27. Discuss the concept of Consumer's Surplus.   (5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Examine the law of variable proportions.

29. Discuss Hicksian method of bifurcation of price effect into income and substitution effects.

30. What is Price Elasticity of Demand? What are the methods of measuring Price Elasticity of Demand?

31. State and explain the Law of Equi-marginal Utility with the help of suitable diagram.

(12 x 2 = 24)

B. A. DEGREE END SEMESTER EXAMINATION
SEMESTER 4: ECONOMICS
COURSE: MACROECONOMICS I

Time: Three Hours   Max. Marks: 75

PART A
Answer All (1 mark each)

1. Double Counting

2. Macro dynamic

3. Saving- Investment Identity

4. Neutrality of Money

5. Equation of exchange

6. Autonomous consumption

7. Investment function

8. Marginal Efficiency of Capital (MEC)

9. Aggregate output.

10. LM curve

(2 x 8 = 16)

PART B
Answer any 8 (2 marks each)

11. What are economic models?

12. Distinguish between Personal Income and Personal Disposable Income

13. Circular Income Flow in a Three- Sector Economy with Government Sector

14. Comment on "Supply creates its own demand"

15. Write a note on Roberson's equation on determining value of money

16. Suppose I=Rs.50, C=Rs.l00+0.8Yd, Yd=Y. Find the equilibrium level of income.

17. Explain the difference between APC and MPC

18. Explain disposable income.

19. Importance of multiplier.

20. Money market equilibrium.   (1 x 10 = 10)

PART C
Answer any 5 (5 marks each)

21. Give a short note on environmental concerns in national income accounts

22. Discuss classical theory of interest?

23. " Cash balance approach is superior to cash transaction approach". Elucidate

24. Discuss Keynes' Psychological law of consumption

25. Evaluate the saving function.

26. Explain briefly about under employment equilibrium

27. Establish the relationship between MPS and the multiplier.   (5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. What is national income? Briefly explain the different methods of national income estimation

29. How are the equilibrium levels of employment, real wage rate and output determined in the classical theory

30. Discuss Keynesian theory of investment.

31. Elucidate Keynesian two-sector model of income determination.   (12 x 2 = 24)

BA DEGREE END SEMESTER EXAMINATION
SEMESTER 5: ECONOMICS (OPEN COURSE)
COURSE: ECONOMICS IN EVERYDAY LIFE

Time: Three Hours   Max. Marks: 75

PART A
Answer all questions (1 mark each)

1. Federal finance

2. IMF

3. Balance of Trade

4. Expenditure Method

5. Giffen goods

6. Corporate tax

7. Customs duty

8. Bills of exchange

9. Promissory notes

10. Bonds   (1 x 10 = 10)

PART B
Answer any 8 (2 marks each)

11. Gains from Trade

12. Differentiate between spot market and futures market.

13. Terms of Trade

14. Differentiate between individual demand and market demand.

15. Distinguish between marginal utility and total utility.

16. Income tax

17. Service tax

18. Balanced budget

19. Core banking

20. SEBI   (2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. Analyse foreign exchange markets.

22. Briefly explain federal finance in India.

23. Elucidate the theory of utility.

24. Explain various phases of a trade cycle.

25. What are the various direct taxes imposed in India?

26. Explain the role of SEBI in Indian stock markets.

27. What are the functions of RBI?   (5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Illustrate the sectorial contribution to GDP and the changes in its composition since independence of the country.

29. Analyse various concepts of demand and explain how it functions in the market.

30. Explain how fiscal and monetary policies are used to tackle the problem of inflation and deflation.

31. Critically analyse the role and functions of banking in an economy.   (12 x 2 = 24)

B. A. DEGREE END SEMESTER EXAMINATION - MARCH
SEMESTER – 6: ECONOMICS (CORE COURSE)
COURSE: INTRODUCTORY ECONOMETRICS

Time: Three Hours   Max. Marks: 75

PART A
Answer all the questions (1 mark each)

1. Standard error

2. Statistical Inference

3. Hypothesis testing

4. Regression

5. Stochastic disturbance term

6. SRF

7. Ordinary Least Square Method

8. Point Estimation

9. Interval estimation

10. Time Series data $(1 \times 10 = 10)$

PART B
Answer any 8 (2 marks each)

11. Unbiasedness

12. Student t distribution

13. Null and alternative hypothesis

14. Theoretical and applied econometrics

15. Level of significance

16. Goals of econometrics.

17. R^2

18. Autocorrelation

19. BLUE

20. Multiple Regression Model $(2 \times 8 = 16)$

PART C
Answer any 5 (5 marks each)

21. State and explain the assumptions of CLRM.

22. What is Multicollinearity? Explain its causes and consequences.

23. Explain the different tests of Heteroscedasticity.

24. Explain the various criteria for evaluating the estimates in econometric research.

25. What are the uses limitations of econometrics?

26. Explain the numerical properties of OLS estimators.

27. What are the uses of t – test. (5 × 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Describe the methodology of an econometric research. Discuss the limitations.

29. Explain the assumptions of CLRM model and discuss the normal equations of OLS.

30. Explain the errors involved in violating the assumptions of classical linear regression model.

31. State Gauss–Markov theorem. (12 × 2 = 24)

B. A. DEGREE END SEMESTER EXAMINATION MARCH 2017
SEMESTER IV: BA ECONOMICS
COURSE: 15U4CRECO6: PUBLIC ECONOMICS

Time: Three Hours   Max. Marks: 75

PART A

Answer **all** questions in one or two sentences. Each question carries 1 mark.

1. Public finance
2. Stabilization function
3. Budget
4. Escheats
5. Indirect tax
6. Special assessments
7. Grants-in-aid
8. Irredeemable debts
9. Vertical equity
10. Fiscal federalism   (1 x 10 = 10)

PART B

Answer **any eight** of the following in three or four sentences. Each question carries 2 marks.

11. Give any two limitations of the role of state.
12. What is public economics?
13. Write a short note on progressive taxation.
14. State justification for benefit principle of taxation.
15. What do you mean by impact of taxation?
16. Give any two objectives of public debt.
17. Distinguish between internal and external debt.
18. Write any two merits of direct taxes.
19. Give two suggestive functions of Finance commission.
20. List the principles of federal finance.   (2 x 8 = 16)

PART C

Answer **any five** of the following in not more than one page. Each question carries five marks.

21. Discuss the difference between private and public goods.

22. Analyze the scope of public economics.

23. Explain different canons of public expenditure.

24. Bring out the different methods of debt repayment.

25. State the concept of tax-shifting.

26. Explain the ability to pay principle of taxation.

27. Discuss various kinds of central aid to the state Governments.   (5 x 5 = 25)

PART D

 Answer **any two** of the following in not exceeding four pages. Each question carries 12 marks.

28. Discuss the theory of the maximum social advantage. How it can be achieved?

29. Illustrate the important effects of taxation.

30. Critically review the recommendation of Thirteenth Finance Commission.

31. Describe the meaning, types and the burden of public debt.

                                                                (12 x 2 = 24)